

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A high-voltage connector having a plug (10) with a rubber cone (13) for insertion into a coupling socket (20), in which the length of the rubber cone (13) is dimensioned such that, in the a fastened inserted state, there remains an expansion space (25) between an end face of the rubber cone (13) and a bottom of the coupling socket (20), into which expansion space (25) the rubber cone (13) can expand thermally.
2. (Original) A high-voltage connector as claimed in claim 1, in which the expansion space (25) is filled with a medium which can be compressed by a thermal expansion of the rubber cone (13).
3. (Currently amended) A high-voltage connector as claimed in claim 2, in which the medium is at least one of a gas and/or a silicone material having gas cavities.
4. (Original) A high-voltage connector as claimed in claim 1, in which a potential well (21) is arranged in the coupling socket (20), which potential well (21) is connected to at least one high-voltage contact pin (14, 15) of the connector and encloses the expansion space (25) at least to the extent that during the intended use no spark discharges can occur at the contact pin (14, 15).
5. (Original) A high-voltage connector as claimed in claim 1, having a compression spring (16) acting on the plug (10), by means of which compression spring (16) the

latter is prestressed in the direction of the inserted position.

6. (New) A high-voltage connector as claimed in claim 3, wherein the gas is nitrogen.
7. (New) A high-voltage connector as claimed in claim 1, in which the expansion space (25) is filled with a vacuum.
8. (New) A high-voltage connector as claimed in claim 4, wherein the potential well (21) has an opening and the contact pins (14, 15) are positioned through the opening.
9. (New) A high-voltage connector comprising:
a plug (10) with a rubber cone (13) for insertion into a coupling socket (20), the rubber cone (13) having dimensions to provide for an expansion space (25) between the rubber cone (13) and the coupling socket (20) when the rubber cone (13) has been fastened into the coupling socket (20), wherein the expansion space (25) allows for thermal expansion of the rubber cone(13).
10. (New) A high-voltage connector as claimed in claim 9, further comprising:
a potential well (21) in the coupling socket (20) and connected to at least one high-voltage contact pin (14, 15), the potential well (21) surrounding the expansion space (25) to prevent spark discharges at the contact pin (14, 15).
11. (New) A high-voltage connector as claimed in claim 10, in which the expansion space (25) is filled with a medium which can be compressed by a thermal expansion of the rubber cone (13).
12. (New) A high-voltage connector as claimed in claim 11, in which the medium is a

gas.

13. (New) A high-voltage connector as claimed in claim 12, wherein the gas is air.
14. (New) A high-voltage connector as claimed in claim 12, wherein the gas is nitrogen.
15. (New) A high-voltage connector as claimed in claim 11, in which the medium is a silicone material having gas cavities.
16. (New) A high-voltage connector as claimed in claim 10, in which the expansion space (25) is filled with a vacuum.
17. (New) A high-voltage connector as claimed in claim 10, further comprising a compression spring (16) acting on the plug (10).
18. (New) A high-voltage connector as claimed in claim 17, wherein the compression spring (16) biases the plug (10) in a direction of an inserted position.
19. (New) A high-voltage connector as claimed in claim 10, wherein the potential well (21) has an opening and the contact pins (14, 15) are positioned through the opening.